Sky Timber Sale Logging Feasibility Report

<u>Notes</u>: Due to the variability of the terrain throughout the sale, there may be the need of intermediate support trees in units not so stated in this analysis. Rigging heights are based on a particular profile and will also differ from given heights throughout each unit. Unless otherwise stated skyline yarding direction will be uphill and Ground Base skidding directions will be downhill. All skidding and yarding operations will have constraints within stream corridors in all units. See contract provision C6.42# for special yarding and skidding methods. All Ground based skid roads and landings must be approved prior to use. Skid roads will be placed 150' apart.

For skyline operations, a carriage with skyline clamping capability will be required. Unless otherwise stated in the unit comments the Diamond D2000, 42' boom, 7/8" skyline, 5/8 inch mainline and 1/2 inch haulback line will be used with an Acme 20 carriage for profile analysis. In those units requiring downhill yarding, the distance between skyline corridors may vary from the standard to accommodate.

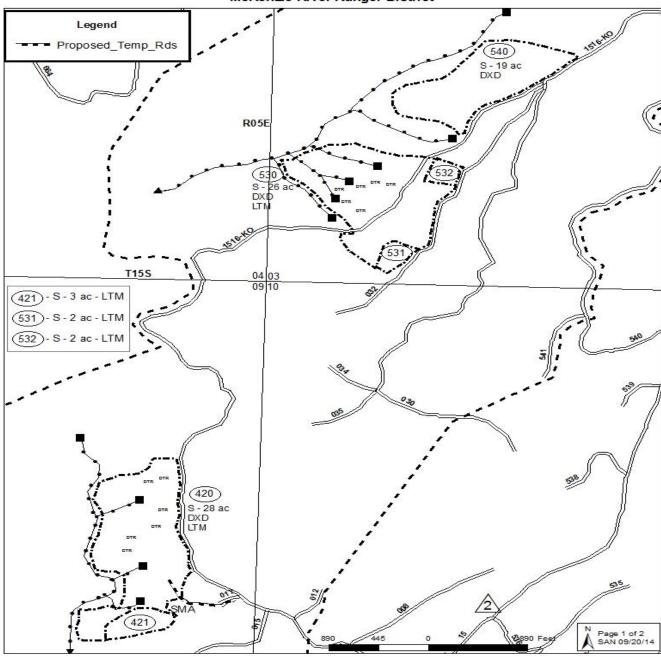
In those areas which are recommended for Ground Base systems, and which have slopes in excess of 30%, shovel operations can be considered. Each situation must be approved by the TSO with the cooperation of the zone Geologist.

Traditional Ground based equipment is not permitted within Riparian reserves for all stream classes. On class 1, 2, and 3 streams a 60' no harvest buffer with an additional 60' buffer in which ground based equipment will not be permitted. On those units where streams are present, trees to be removed may need to be directional felled to allow access for ground based equipment to reach.

Skyline corridors are permitted within stream buffers, however all timber cut in No Harvest Buffers will be left in place. Full suspension will be required when yarding over perennial streams. Where full suspension is not obtainable over intermittent streams, partial suspension is required and limited to that period when the stream is dry.

Intermediate support tree and tail spar heights are determined in accordance to OSHA standards and guidelines.

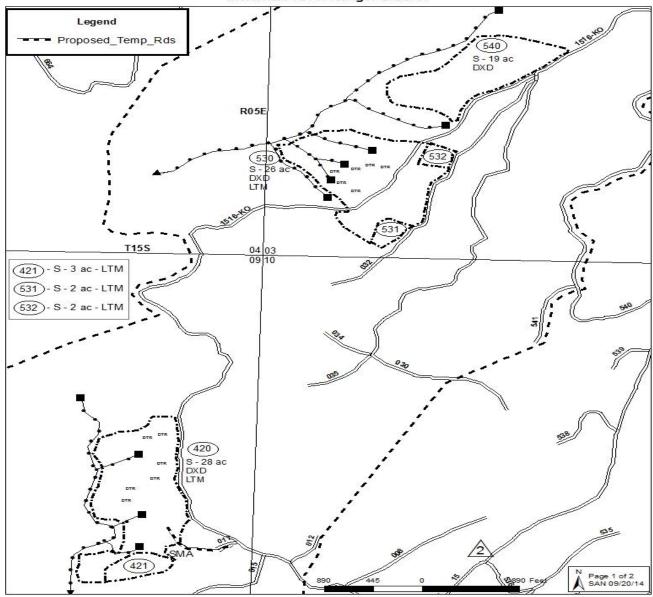
There may be small areas along roads and near landing sites that can be harvested in a manner not specified in the logging plan. With prior approval from the TSO these areas may be harvested using alternate methods of operation.



Unit No: 420 Elevation: 2360 %Slope: 25-55 Spacing: 15 feet

<u>Discussion:</u> Road 1516 is narrow however has a number of good landing sites. Four are identified on the map as dots. The spur road into the southern piece of the unit will provide for shorter reaches on that ground. The longest yarding distance for the unit is approx 1200'. There is bigger timber to the west of the unit across the class 2 stream and can be used for tail spars. Any timber felled in the no harvest buffer for corridors will remain on site. The temp spur length into the unit is approx. 850'.

Sky Timber Sale Sale Area and Slash Disposal Map Willamette National Forest McKenzie River Ranger District

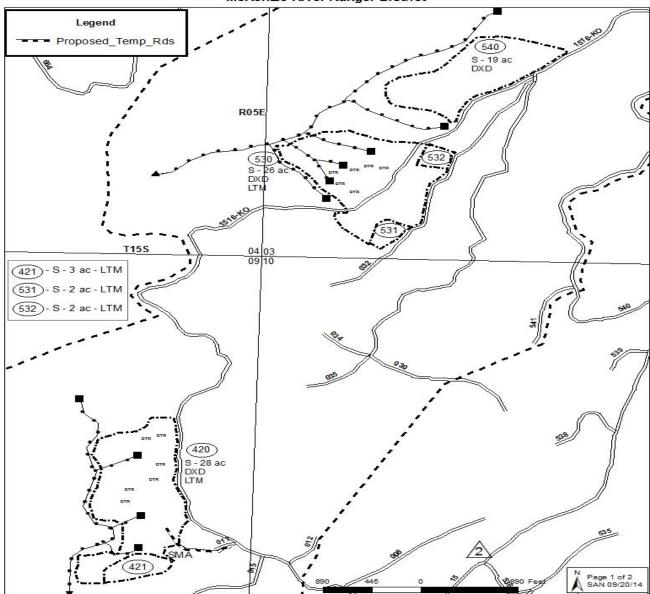


Unit No: 530 Elevation: 3100 %Slope: 40-65 Spacing: 15 feet

<u>Discussion:</u> The unit has two possible configurations. The best landings are identified by dots on the map. One alternative is to yard the unit from the upper road which would require skyline lengths of over 2000'. Tag line may be required on some yarders for this alternative.

The second alternative is to have settings on both the 1516 and the 1516032 roads. The portion of the unit 300-500 feet above the class 2 stream is lacking in tail spar trees. The larger timber across the class 2 stream may need to be used for tail spar trees. The profiles run on the unit shows a required skyline length of 1540' for a standing skyline configuration.

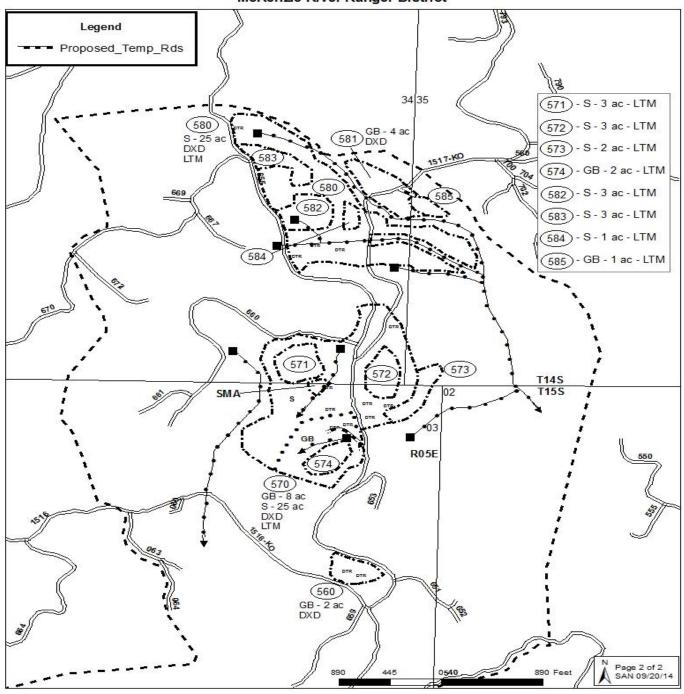
There are numerous class 4 streams in the unit which will require full suspension during flow season. Partial suspension during the non-flow, or dry season.



Unit No: 540 Elevation: 3100 %Slope: 40-65 Spacing: 15 feet

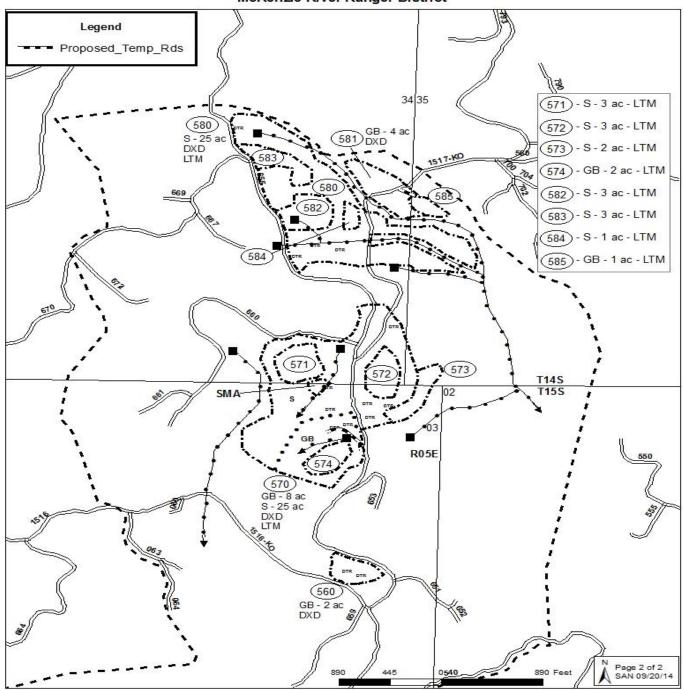
<u>Discussion:</u> The best landing sites are shown on the map. The timber surrounding the unit is adequate in size to provide for tails spars. The average yarding distance is approx. 450'.

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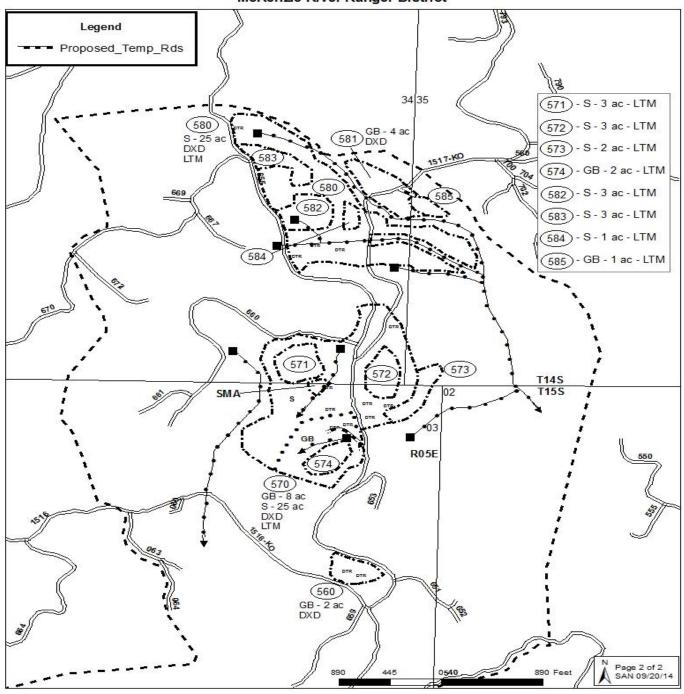
Unit No: 560 Elevation: 3300 %Slope: 0-40 Spacing:

<u>Discussion:</u> There is a good landing site in the open area off the south east side of the unit right along road 1517 road.



Unit No: 570 Elevation: 3400 %Slope: 5-45 Spacing:

<u>Discussion:</u> There is a temp spur proposed into the unit off the 1517 road. This will access the GB portion of the unit and a landing at the end of the spur may also be used to skyline the area to the west boundary. There is a "Special Habitat Site" with a 60' buffer in the unit which will be a no enter area, shown on the map as "SMA." The spur length into the unit is approx. 450'.



Unit No: 580 Elevation: 4000 %Slope: 15-45 Spacing:

<u>Discussion:</u> The will be a piece of ground based skidding to be done above the 1517 road on the north boundary of the unit. The best landing site are identified on the map as dots. There are also numerous streams in the unit, class 3 and 4. Class 3 stream will require full suspension if skyline corridors are placed through the buffers. The timber in the unit will provide for good intermediate supports and tail spars. The spur into the unit is approx. 200'.